

Oregon Gray Matters

How Will Older Workers Help Fill Oregon's Workforce Demand?

A fact-finding report of the
Portland Community College Taskforce on Aging



March 2007

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OREGON GRAY MATTERS

Foreword

The fact that the first Baby Boomers turned 60 last year has been well publicized in professional and popular media. The impact their impending retirement will have both on the workforce and on the economy—locally, nationally, and globally—is less well known. Also unclear is whether those older workers will choose to retire. But one point is becoming more widely acknowledged: Should those older workers indeed leave the labor force at or near customary retirement age, employers in all sectors will face a considerable workforce shortage. (In Oregon, labor force participation rates fell nearly 3% from 2001 to 2005 for the overall Oregon labor force, but rose by 9.6% for those 55 and older.) The challenge for employers will be not only how to replace those older workers, but how to replace the knowledge base they take with them.

There is, however, good news: indications from some studies (including this one) are that many older workers would prefer to work beyond traditional retirement age, whether for personal enjoyment, economic enrichment, or varied other reasons. As their expressed intent meshes well with the needs of the labor market, Oregon is poised to capitalize on the tremendous potential of its aging workforce that could well be the salvation for the state's projected workforce shortage within the next decade. Realizing that potential will depend on whether Oregon can bring together educational institutions, employers, business organizations, workforce agencies, state leaders and decision-makers to craft the policies, practices and partnerships that will encourage older residents to remain in the workforce.

Oregon Gray Matters: How Will Older Workers Help Fill Oregon's Workforce Demand? is the result of a broad-based partnership. The University of Indianapolis Center for Aging & Community team prepared the report. (The idea for *Oregon Gray Matters* stemmed from *Gray Matters: Opportunities and*

Challenges for Indiana's Aging Workforce. Undertaken by the University of Indianapolis Center for Aging & Community and its partners, the Indiana report sought to determine the impact of that state's aging workforce on its employers and workers.) Major funding for *Oregon Gray Matters* was provided by the Oregon Department of Community Colleges and Workforce Development, along with significant contributions from Worksystems, Inc. and PCC's Center for Business & Industry. The Oregon Employment Department provided data related to Oregon demographics and older workers. AARP's publication of the report makes it available to the governmental, business, and educational institutions that will be crafting policies and programs enabling Oregon to capitalize on the potential of its aging workforce.

The findings of *Oregon Gray Matters* have direct application for planning among Oregon's employers, older workers, academic institutions, and other workforce entities to retain and retrain its older workers for the betterment of all.

We welcome the reader to join the challenge!

Portland Community College Taskforce on Aging

March 2007

Oregon Gray Matters

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1. EXECUTIVE SUMMARY

The *Oregon Gray Matters* report was commissioned by the Portland Community College Taskforce on Aging as a fact-finding endeavor to help Oregon employers develop strategies for continuing to tap into a dynamic local workforce. In addition, this report is intended to help Oregon's employment and academic entities—particularly community colleges—position older workers to re-skill, re-career, and remain competitive for their projected extended work life.

This report addresses two major questions:

1. Are Oregon's current older workers in a position to help fill the state's future workforce needs?
2. Will Oregon's increasing numbers of active seniors (age 55 years and older) stay in or return to the workforce?

The report finds that, while Oregon's aging demographics appear to be consistent with the norm for the U.S., its aging population appears to be more "active" than the average in employment, volunteer, and educational pursuits. The report's analysis concludes that—given the right conditions and incentives to both older employees and their employers—Oregon can count on its aging workforce to meet most of its projected workforce needs within the next decade.

- Using an assumption of constant labor force participation and employment activity, Oregon can expect an overall increase of older workers of approximately 36% over 8 years, compared with a total workforce growth of 6.6%.
- Using an assumption of accelerated labor force participation and employment activity, the increase of older workers could jump to 66%, compared with a total workforce growth of 10.7%.

The employment of older Oregon workers differs markedly from the larger workforce, with:

- A higher concentration in the government and in the third sector of non-profits, education, and healthcare.
- A much higher percentage of older workers who are self-employed.
- A higher concentration in the knowledge and information occupations that are growing as Oregon moves rapidly toward an innovation economy.

Oregon shows many signs of a state entering the “longevity revolution”—one in which active aging will have greater impact in the workplace and in post-secondary education. How to best make use of Oregon’s older workforce potential is largely not addressed in this report, as it is beyond its fact-finding parameters and requires further research and exploration into effective policy and business practices. Whether Oregon capitalizes on this great potential will depend on whether the state can bring together the necessary range of business, civic, education, and government actions and partnerships to enable older workers to extend their labor force participation. The findings of *Oregon Gray Matters* provide a solid launching point for initiating discussion.

2. PURPOSE AND SCOPE

The PCC Taskforce on Aging commissioned the University of Indianapolis Center for Aging & Community to produce *Oregon Gray Matters* as statistical backdrop to the Taskforce's Age Boom Conference, convened at PCC on February 28, 2007.

The report provides a profile of aging workers (defined for these purposes as those who are 55 years and older), a description of the demand for future workers, and the outlook for older worker supply to fill demand, all as background to the conference discourse. In a few instances, data on people over 50 years of age were used because data for 55+ years of age were not readily available.

The scope of this profile, which sets the stage for further discussions about the future of the Oregon workforce, includes:

- Descriptions of the characteristics of Oregon's aging workforce, with particular focus on different classifications of work (private, government, and self-employed), occupations, and modes of employment (full-time, part-time).
- Descriptions of the education and training participation of Oregon's aging population, potentially leading to upgrades of knowledge and skills.
- Forecasts of likely growth in the aging workforce using two scenarios:
 - Scenario 1: Continuation of past trends.
 - Scenario 2: Acceleration due to increased employment activity (including entrepreneurial activity) and accelerating labor force participation.
- Summaries of workforce projections by age, education, and occupation.

- Estimates of the degree to which future workforce needs could be met by aging workers under the two scenarios.

3. INTRODUCTION – WHERE WILL TOMORROW’S WORKERS COME FROM?

Like most states in the U.S., Oregon is an aging state. Prudent workforce planners are asking questions, including:

- Where will tomorrow’s workers come from?
- What is the status of the current workforce and how will it relate to future demands of organizations?
- Are older workers in a position to help fill future workforce demand?

According to “A Profile of Older Workers in Oregon,” a 2002 U.S. Census Bureau report that refers to private employment covered by unemployment insurance:

- 1,027,592 people age 14 years and older were employed in Oregon in 2002. (An estimate of *all* employment—public and private—by the Bureau of Economic Analysis for Oregon in 2005 is 2,224,838.)
- 30,168 were 65 years and older and 113,053 were 55-64 years old, totaling 13.9% of the Oregon workforce 14 years or older.
- Average 2002 monthly earnings of those 55-64 were \$3,350 and those 65 and older were \$1,861, 15.9% higher and 35.6% lower respectively than the all-age average of \$2,890.
- The workforce 45 years and older increased significantly between 1991 and 2002 while the proportion of those 65 and older who continued working increased, but only slightly.
- Industries with more than 1 in 5 workers 55 years and older included private household services, local and urban transit, oil and gas extraction, and membership organizations. Those industries most likely to employ people 65 years and older were food and beverage establishments, business services, and health services. Of industries employing more than 500 workers 65 years and older, the highest paying industry was lumber/wood products.

- On average, in 2002, for workers 65 and over, about 2,800 jobs were created and nearly 5,400 were lost.

Employment and compensation numbers, however, do not tell the whole story of how an aging workforce can and will impact a state. In 2005, the University of Indianapolis Center for Aging & Community (CAC) began an innovative multi-year research project titled *Gray Matters: Opportunities and Challenges for Indiana's Aging Workforce*. In the first publication of data from Phase I of the study (February 2006), all 50 states were compared on the degree to which they were aging. Oregon scored in the average range on the degree to which its population is aging, relative to the other 49 states.

The Phase I report also compared all 50 states on the degree to which they were “actively aging.” Active aging was determined with a series of metrics indicating the degree to which people 55 and older are involved in employment, volunteerism and the pursuit of learning. Oregon scored in the top 25 percent on active aging, according to the Aging Matrix cited in CAC’s *Gray Matters* report. Oregon’s ranking fits with both an in-state and out-of-state image of Oregonians as making the best out of life and enjoying the outdoors. It also suggests a promising flow of near-retirees staying on for additional years of work. The imperative question remains, however: How many older workers will remain in the workforce, for how long, and under what work patterns and conditions?

Some countries, including Canada, Australia and Norway, are already taking the longevity revolution seriously. According to the Organization for Economic Cooperation and Development (OECD), in European countries, there will be one person in retirement for every one worker by 2050. The rapidly aging population will put pensions at risk and increase the tax pressures on the working population. To address these issues, the OECD held a *High-Level Policy Forum on Ageing and Employment Policies* in Brussels, Belgium in October 2005 and has since been working on reviews of their 21 member

countries. Generally, the OECD recommended that work be undertaken to dispel the myth that retirement is necessary to make room for younger workers. Instead, they suggested policies to enhance the employability of older workers. In Sweden, policies are in place that provide flexibility to combine work and pensions after age 61, allowing for flexible work schedules to help retain older workers. To enhance the skills of older workers, Canada is promoting workplace training and has a “Lifelong Learning Plan” that enables older workers to use retirement savings to finance full-time education and training.

To maintain its above average rates of employment and economic growth, Australia is working to reverse the decline in labor force participation rates of older men and to reinforce rising rates of employment for older women by strengthening work incentives such as workplace flexibility and lifelong learning strategies. Norway has the second highest employment ratio for the population 50-64 years old in the OECD (74.1%) and about one-third of its 64-74 year old population is still employed. According to the 2005 conference report, Norway’s success in maintaining high numbers of older adults in the workforce was achieved with employment incentives, including additional vacation time and education/training opportunities.

In recent years, many studies have projected future U.S. worker and skills gaps as the nation’s economy continues to grow, creating not only more jobs, but also jobs requiring advanced knowledge and skills.

How will Oregon fill this demand?

- Immigration?
- Higher productivity of incumbent workers?
- Newly minted knowledge, computer acumen and technical skills of young entry-level workers?
- Aging workers who stay in the workforce?

Scholars differ on the degree to which each of these factors will contribute to balancing demand with supply.

Smart states will be those that plan ahead. Can and will Oregon's increasing numbers of active seniors stay in, or return to, the workforce? Few states are giving serious thought to this issue. Given its reputation as a policy innovator, it is not surprising that Oregon should be one of the early states to get ahead of the aging workforce curve as many boomers decide to continue their work life beyond 65 years old for personal and/or financial reasons.

4. PROFILE OF OREGON'S AGING WORKFORCE

This section provides the most current data on characteristics of workforce participation of Oregon's older population, defined as those 55 and older.

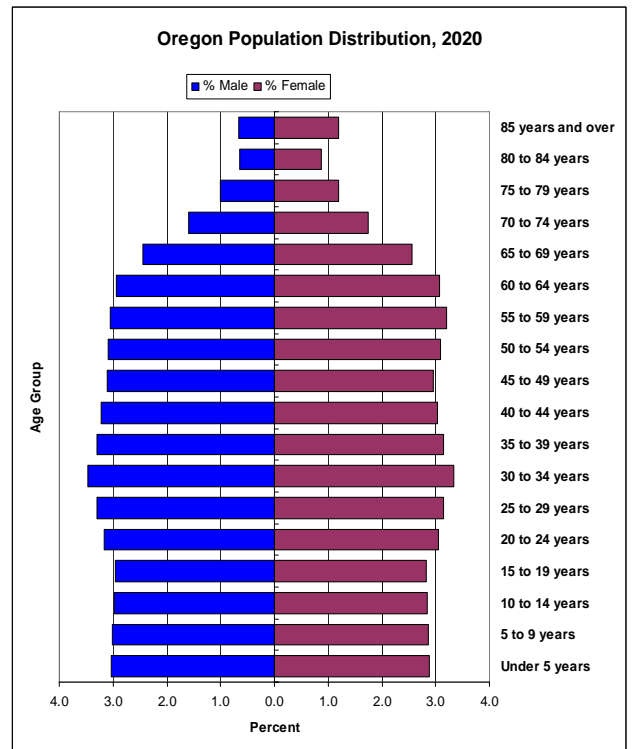
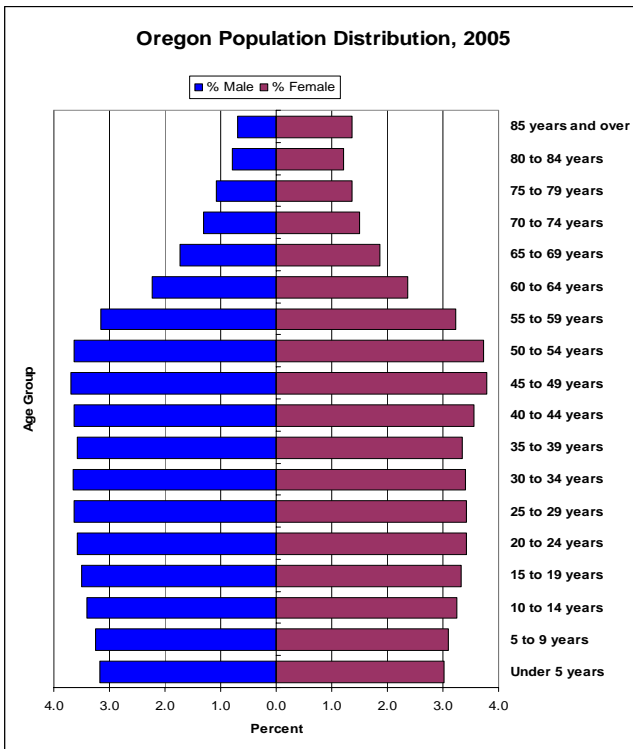
Profile characteristics include:

- Age distribution
- Employment by age
- Labor force participation rate and mode of employment
- Class of worker (private, government, self-employed)
- Type of job (full-time, part-time)
- Occupation
- Industry

Basic data on aging demographics were provided by the Oregon Employment Department (OED). The U.S. Census Bureau's Current Population Survey (CPS) provided some additional workforce data, such as participation rates, by age. Due to its relatively small sample size, the moving averages of three years (e.g., 2004-2006 for the most recent data) were used with CPS data.

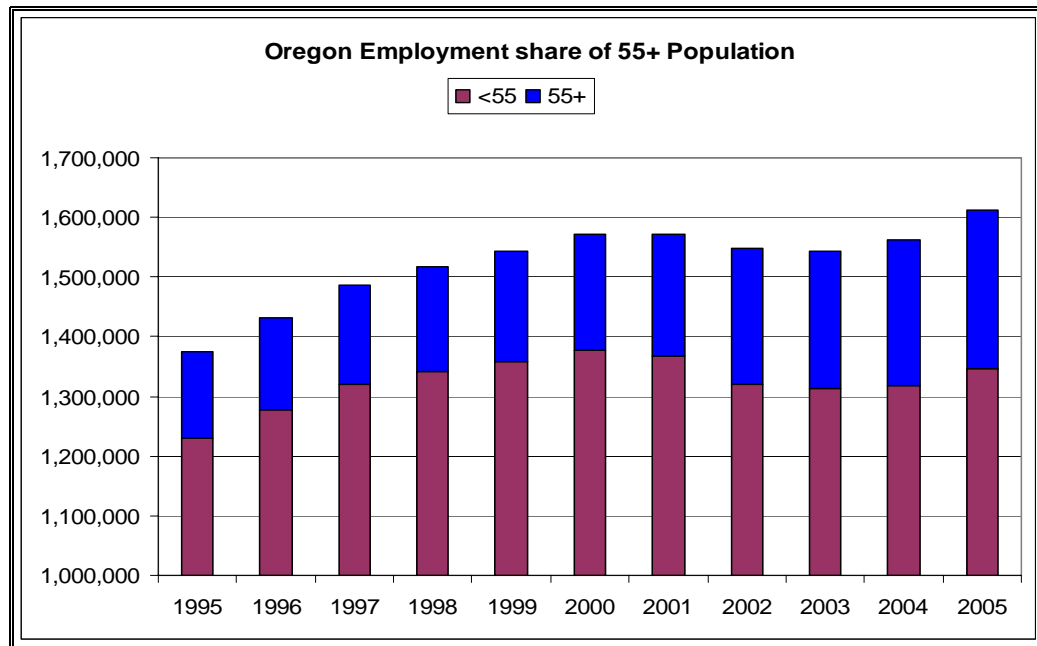
Age Distribution

- In 2005, the older population (55 and older) in Oregon constituted approximately 24% of the population. In 2020, this share is expected to rise to 26.2%. Changing distributions in the population are illustrated in the figures below, which show the population distribution in 2005 and the distribution that is projected for 2020.



- Changing shapes of population pyramids show:
 - Higher percentages of those 60 years and older in 2020, especially women.
 - Lower percentages of those 20-59 years in 2020—resulting in less “bulge” and an evening out of available workers by age.
 - Good supply of potential adult workers (5-year cohorts over 2%) up to age 69 years in 2020, i.e., an extension of “working age population.”

Full-time Employment Patterns by Younger and Older Workers in Oregon



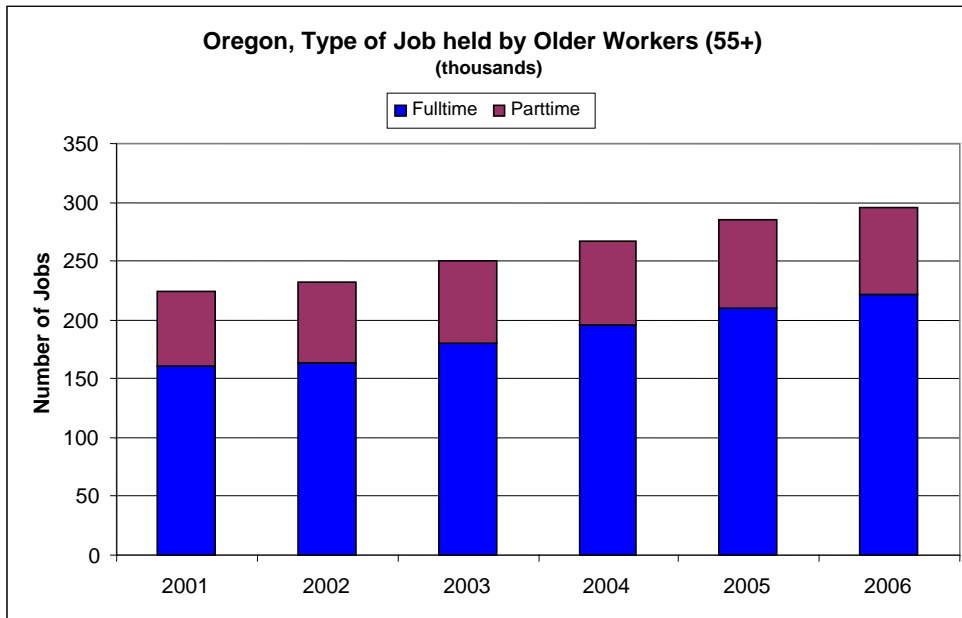
Source: U.S. Census Bureau, Local Employment Dynamics

- The share of the employed 55 years and older has increased by 55% during the 10-year period between 1995 and 2005. These data represent the number of those engaged in private employment who are covered by unemployment insurance.

Labor Force Participation and Mode

Oregon Labor Force Participation Rates (Employed plus Unemployed as a Share of the Civilian Population)						
Age Group	2001 (%)	2002 (%)	2003 (%)	2004 (%)	2005 (%)	2006 (%)
55-64	61.5	61.6	62.1	63.1	63.9	64.4
65-74	15.4	17.4	18.2	20.1	20.5	20.4
75+	6.5	4.8	3.6	4.3	6.3	7.4
TOTAL 55+*	35.8	36.8	39.4	42.6	45.4	47.0
TOTAL 16+	68.1	67.5	67.1	66.1	65.3	-
<i>Source: U.S. Census Bureau, Current Population Survey; Bureau of Labor Statistics</i> <i>Note: 3-year moving average</i> <i>* Weighted average for age 55+</i>						

- Labor force participation rates, representing the percent of the population who are working or willing/able to work, fell from 2001 to 2005 for the overall Oregon labor force. During the same time period, the share of the 55 and older population that participated in the labor force increased.
- Not only did the *number* of workers 55 and older increase from 205,097 in 2001 to 264,930 in 2005, but the *labor participation rates* for this same cohort rose nearly 10%, from 35.8% to 45.4%.



Mode of Employment in Oregon						
	2001 (%)	2002 (%)	2003 (%)	2004 (%)	2005 (%)	2006 (%)
Population 16 years and older						
Full-time	78.6	78.6	78.1	78.2	78.2	78.6
Part-time	21.4	21.4	21.9	21.8	21.8	21.4
Older Workers (55+)						
Full-time	72.0	70.5	72.3	73.2	73.8	75.1
Part-time	28.0	29.5	27.7	26.8	26.2	24.9
<i>Source: U.S. Census Bureau, Current Population Survey</i>						
<i>Note: 3-year moving average</i>						

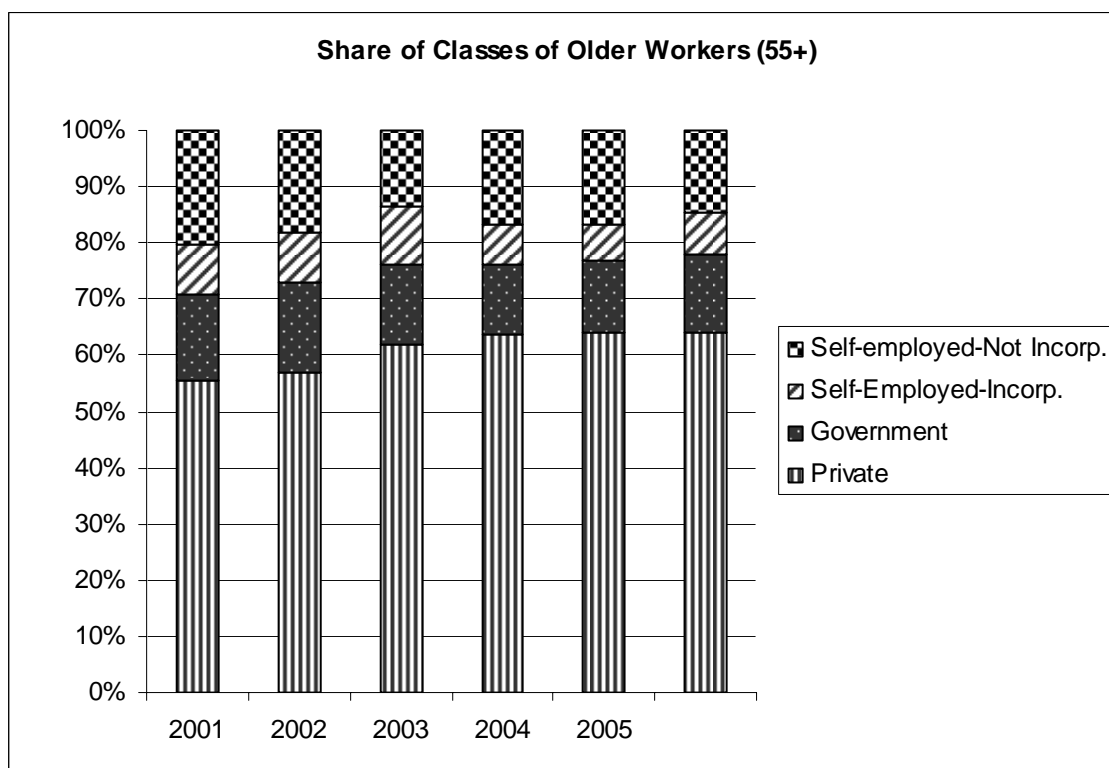
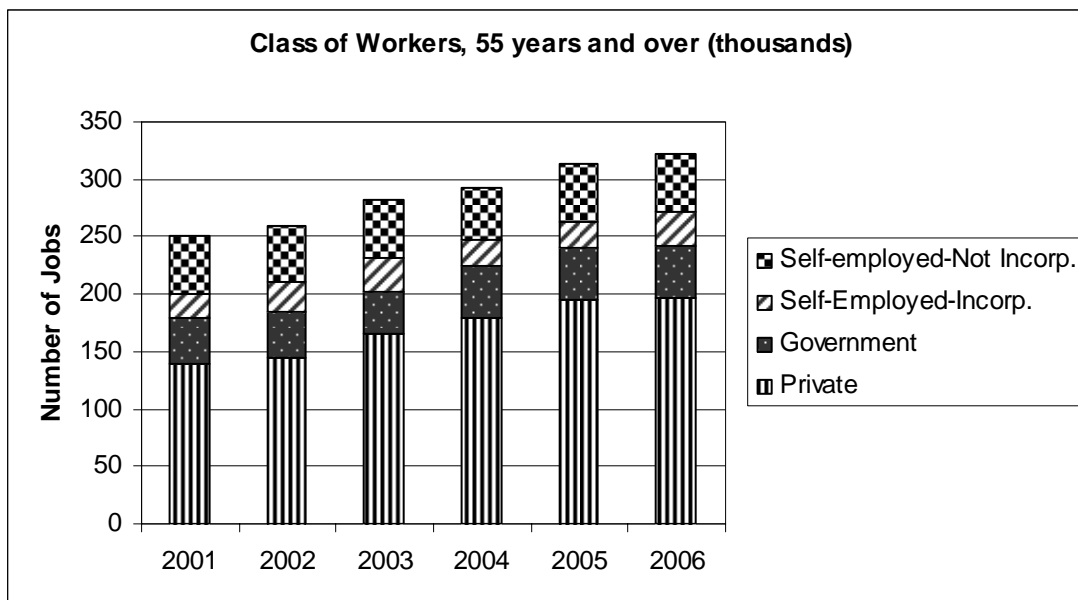
Between 2001 and 2006, for all employed older workers, Oregon has seen those working fulltime increase (from 72% to 75.1%) and those working part time decrease (from 28.0% to 24.9%). During that same period, the full-time and part-time percentages of all employed Oregonians (age 16+) have remained constant.

Class of Worker

Class of Worker in Oregon						
	2001 (%)	2002 (%)	2003 (%)	2004 (%)	2005 (%)	2006 (%)
Population 16 years and older						
Private	73.8	73.6	73.8	74.3	73.8	72.8
Government	11.8	12.7	13.5	13.2	13.0	12.6
Self-Employed-Incorporated	4.1	4.2	4.2	3.5	3.7	4.3
Self-Employed-Not Incorporated	10.1	9.1	8.2	8.4	8.9	9.6
Older Workers (55+)						
Private	55.5	57.3	60.4	62.3	62.2	61.3
Government	16.0	15.3	14.6	14.1	15.1	15.1
Self-Employed-Incorporated	8.6	9.8	9.5	7.2	6.0	7.8
Self-Employed-Not Incorporated	20.0	17.5	15.5	16.4	16.6	15.8
<i>Source: U.S. Census Bureau, Current Population Survey</i>						
<i>Note: 3-year moving average</i>						
<i>Note: Column totals may not equal 100% because unpaid workers in family businesses and those who have never worked were excluded.</i>						

- The majority of the working population is employed in the private sector, regardless of age.
- However, the share of private sector workers decreases significantly with increasing age, with older workers working less in the private sector, and more so as unincorporated or incorporated self-employed.
- Since 2001, though, the share of older workers in the private sector has been mostly increasing.
- Overall, the share of self-employed older workers has been decreasing to a greater extent than for the total working population.

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- Graphical illustrations of data in the Classes of Older Workers (55+) tables show labor force participation of the 55-and-older group by both numbers of jobs (in thousands) and percentage of workforce.

Occupation

Oregon Occupational Distribution for those 55+ 2004-2006 (%)	
Management, business, and financial occupations	21.8
Professional and related occupations	19.9
Office and administrative support occupations	17.2
Service occupations	11.4
Sales and related occupations	11.0
Production occupations	5.5
Transportation and material moving occupations	5.2
Installation, maintenance, and repair occupations	3.6
Construction and extraction occupations	3.2
Farming, fishing, and forestry occupations	1.3
Total	100.0
<i>Source: U.S. Census Bureau, Current Population Survey Note: 3-year average</i>	

- Nearly 60% of Oregon workers 55 and older are employed in management, business, financial and professional occupations; and office and administrative support occupations, i.e., white- and pink-collar jobs.

Age Distribution by Occupation in Oregon 2004-2006									
Occupation	Age Group (in years) (%)								Total
	<18	18-24	25-34	35-44	45-54	55-64	65-74	75+	
Management, business, and financial occupations	0.0	2.0	18.6	26.3	26.6	20.1	4.7	1.7	100
Professional and related occupations	0.0	6.1	21.1	24.3	28.0	17.4	2.1	1.0	100
Service occupations	6.8	25.2	25.7	22.4	12.9	5.7	1.1	0.2	100
Sales and related occupations	1.7	20.2	21.5	12.9	29.9	11.6	1.3	0.8	100
Office and administrative support occupations	1.0	13.6	17.0	19.6	28.1	19.0	1.7	0.0	100
Farming, fishing, and forestry occupations	16.6	18.6	25.5	9.2	13.9	11.2	5.1	0.0	100
Construction and extraction occupations	0.0	14.0	35.7	29.0	17.0	4.3	0.0	0.0	100
Installation, maintenance, and repair occupations	1.6	10.3	17.0	20.0	28.8	18.6	2.8	0.7	100
Production occupations	0.0	14.1	25.2	22.9	23.9	12.6	1.3	0.0	100
Transportation and material moving occupations	5.6	16.4	11.3	27.8	22.0	13.8	3.1	0.0	100

Source: U.S. Census Bureau, Current Population Survey
Note: 3-year average

- The highest share of workers 55 and older is found in the category of management, business, and financial occupations, where they comprise 26.5% of the total workforce.
- Other occupations in which more than 20% of workers are 55 and older are installation, maintenance, and repair occupations; professional and related occupations; and office and administrative support occupations.

Industry

Distribution of Workers and Older Workers (55+ years) across Industries in Oregon 2004-2006		
Major Industry Category	55+ years (%)	All ages (%)
Retail trade	14.1	13.2
Manufacturing	11.1	13.1
Educational services	10.3	7.8
Health care and social assistance	8.7	10.1
Other services, except government	6.3	4.2
Professional and technical services	6.1	5.5
Construction	5.7	7.9
Public administration	5.2	4.1
Agricultural	4.8	2.8
Administrative and waste services	3.8	4.4
Accommodation and food services	3.8	6.9
Transportation and warehousing	3.5	3.5
Wholesale trade	3.2	3.5
Finance and insurance	3.2	4.0
Real estate, rental, leasing	3.1	2.6
Information (includes publishing)	2.3	2.0
Arts, entertainment, and recreation	1.7	2.2
Forestry, logging, fishing, hunting, and trapping	1.6	0.8
Management of companies and enterprises	0.7	0.1
Utilities	0.6	0.4
Private households	0.5	0.8
Mining	0.0	0.0
TOTAL	100	100
<i>Source: U.S. Census Bureau, Current Population Survey</i>		
<i>Note: 3-year average</i>		

- Older workers have a higher employment share (at least 25% or more) compared to all ages in management; forestry, logging, fishing, hunting and trapping; agriculture; educational services; other services (except government); utilities; and public administration.

Older Workers (55+) as Percentage of All Workers by Industry in Oregon 2004-2006	
Management of companies and enterprises	88.2
Forestry, logging, fishing, hunting, and trapping	34.1
Agricultural	29.4
Other services, except government	24.0
Educational services	22.4
Utilities	22.3
Public administration	21.7
Professional and technical services	18.7
Retail trade	18.2
Transportation and warehousing	16.9
Real estate, rental, leasing	16.8
Information (includes publishing)	16.7
Wholesale trade	15.7
Health care and social assistance	15.1
Finance and insurance	14.6
Arts, entertainment, and recreation	12.7
Construction	12.2
Private households	11.3
Manufacturing	10.9
Accommodation and food services	10.6
Administrative and waste services	7.7
Mining	0.0
<i>Source: U.S. Census Bureau, Current Population Survey</i>	
<i>Note: 3-year average</i>	

- By far the highest concentration of older workers is found in management of companies and enterprises. At a distant second are the forestry, logging, fishing, hunting and trapping industries.
- Interestingly, within the information industries, almost 50% of employees in the publishing industry in Oregon are 55 or older.

5. PROFILE OF THE CURRENT EDUCATION AND TRAINING OF OREGON'S AGING POPULATION

Based on the latest data, this section provides a summary of the education and training of Oregon's aging workforce. The main source of data besides the CPS was the National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS), which provides the age distribution of enrollments by type of degree as well as the number of older adults relative to the number of specific degree holders in that age group. The enrollment data, however, could only be obtained for the 50+ age range instead of 55+, as used in the rest of this report.

Educational Attainment

Educational Attainment of Oregon Adults		
by Age Group in 2006		
	Share of Education Level by Age	
	18-55 (%)	55+ (%)
Less than high school	12.3	12.4
High school graduate-high school diploma	26.9	34.8
Some college, but no degree	26.3	21.5
Associate's degree-occupation/vocational	4.7	4.7
Associate's degree-academic program	4.5	2.2
Bachelor's degree	18.1	14.6
Master's degree	5.6	6.2
Professional school degree	1.1	1.9
<i>Source: U.S. Census Bureau, Current Population Survey</i> <i>Note: 3-year moving average</i> * Because of rounding, columns may not add up to exactly 100%		

- 30% of the 55+ population in Oregon holds some type of college degree, compared to 34% of the population younger than 55.

Percentage of Older Adults (55+) in Oregon at Each Level of Educational Attainment in 2006	
Less than high school	34.6
High school graduate-high school diploma	36.7
Some college, but no degree	30.6
Associate's degree-occupation/vocational	29.7
Associate's degree-academic program	15.9
Bachelor's degree	28.4
Master's degree	31.3
Professional school degree	54.1
<i>Source: U.S. Census Bureau, Current Population Survey</i>	
<i>Note: 3-year moving average</i>	

- More than half of all Oregonians with professional school degrees and about one-third of those with master's degrees are over age 55.
- The bifurcated nature of the older workforce is demonstrated by the highest percentages in the two lowest—and the two highest—levels of educational attainment.

Percentage of College Enrollees in Oregon who are 50+ by Education Level		
	2004 Enrollment*	2005 Enrollment
First professional	1.7	1.7
Graduate	8.6	9.1
Undergraduate	3.8	3.9
ALL	4.3	4.4
<i>Source: National Center for Education Statistics, IPEDS</i>		
<i>Note: 3-year moving average</i>		
<i>* of total enrollment at same study level</i>		

- The highest share of students 50 and older can be found at the graduate level, with 9.1% of enrollments. This level also showed the strongest increase in enrollment of this age group over the last four years.

6. PROJECTIONS OF OREGON'S FUTURE WORKFORCE PARTICIPATION BY OLDER WORKERS

Given the broad trends in Oregon's aging workforce covered in previous sections, this section forecasts likely growth in the aging workforce using two scenarios:

Scenario 1: Continuation of past trends that indicate ongoing improvements in labor force participation rates

Scenario 2: Improvement due to prolonged work life and increased workforce participation, including possible entrepreneurial activity (increased labor force participation as well as an increased share of the labor force that is working)

Introductory Note about Methodology

To forecast the future workforce for an age group, one must do the following:

- Estimate the proportion of that age group that will be active in the labor market (those that either hold a job or seek a job), a measure known as labor force participation. For older workers, this depends on the number of individuals who choose to extend their work life and on how they intend to do that (fulltime, part time).
- Estimate the labor force participation rates relevant to various levels of educational attainment. We know that in the labor force as a whole, those with higher levels of education tend to participate in the labor force more than those with less education.
- Estimate, on average, the percentage of those in the labor force, by age and educational attainment, who are employed either fulltime or part time, and including any class of worker such as self-employed. (The Census Report cited in Section 2 used only private employment covered by unemployment insurance.) Because unemployment varies with changing economic conditions, for this report we used multi-year averages.

- Estimate changes in educational and skill level due to additional education and training.

Not all estimates are directly available for Oregon, and in some instances, limitations of past data make plausible mathematical forecasting questionable. Some estimates are available for the U.S. and not for Oregon. The calculations for the tables below include a number of parameter adjustments and assumptions. The tables are intended to be a “first cut” in providing a sense of magnitude about those older workers potentially available for work in 2014. The year 2014 is chosen because Oregon’s occupational projections are available from the OED to that date, so a match-up can be made.

1. How many people 55+ older will there be in 2014? By education level?

- Oregon’s older population is expected to grow an estimated 24.8% between 2006 and 2014 based on state demographic projections, compared with overall population growth of 7.2%. This means an additional 220,862 potential workers.

Educational Attainment for Older Population (55+) in Oregon, 2006-2014				
	2006	2014 (estim.)	Growth (#)	Growth Rate
Less than high school	110,151	90,809	-19,342	-17.6%
High school graduate	310,564	372,109	61,545	19.8%
Some college, but no degree	191,814	239,269	47,455	24.7%
Associate's degree	61,885	93,952	32,067	51.8%
Bachelor's degree	130,525	177,958	47,433	36.3%
Master's degree	55,459	88,979	33,520	60.4%
Professional school degree	16,863	30,901	14,038	83.2%
Doctorate	14,384	18,530	4,147	28.8%
Total 55+ years	891,645	1,112,507	220,862	24.8%
<i>Source: U.S. Census Bureau; Population Research Center, Portland State University; Authors' Calculations</i>				

- The highest growth rate in the older population is expected among those with professional school degrees, followed by those with master's and associate's degrees. The highest total growth is estimated to be among older residents with high school diplomas, followed by those with some college or a bachelor's degree.
- By 2014, there will be an additional 99,000 in the older population with an education level of bachelor's degree or above and 79,500 with some college or two-year college credentials.

Data and research on how many of these additional older residents will participate in the work force are incomplete. Some observers wonder if those well-educated people of retirement age choosing to relocate to Oregon will participate in the labor force to the same degree as current residents. Estimates under two scenarios are provided below.

2. How many older workers will there be in 2014?

Scenario 1: Continuation of Past Trends

Assuming the current trend of increasing labor force participation among older workers (see table on page 18, which shows a 12%+ increase in rate of participation between 2001 and 2006), with the percentage employed of that labor force remaining constant, and also assuming increasing educational attainment as indicated in the table above (especially for associate's, bachelor's and master's degrees), the following projections can be made:

Scenario 1: Continuation of Past Trends Projected Older Workforce (55+ years) by Educational Attainment 2006-2014				
	2006	2014	# Change	% Change
Less than high school	44,510	39,785	-4,725	-10.62%
High school graduate –high school diploma	139,750	181,548	41,797	29.91%
Some college, but no degree	85,134	115,140	30,006	35.25%
Associate's degree	27,467	45,211	17,745	64.60%
Bachelor's degree	57,062	84,351	27,289	47.82%
Master's degree	24,245	42,175	17,930	73.95%
Professional school degree	7,372	14,647	7,275	98.68%
Doctorate	6,288	8,783	2,495	39.68%
All college degrees	122,434	195,167	72,733	59.41%
TOTAL 55+ workers	391,828	531,640	139,812	35.68%
TOTAL workforce	2,236,310	2,383,802	147,492	6.60%
<i>Note: The above 2006 estimate for the total workforce compares closely to the Bureau of Economic Analysis estimate for 2005 at 2,224,838. Estimates are based on conservative growth assumptions from the Current Population Survey. It should be noted that the total growth in the workforce estimated by the Oregon Employment Department between 2004 and 2014 is substantially higher at 15%.</i>				

- Overall workforce growth of older workers is estimated at 36% over eight years, compared with total workforce growth of 6.6%.
- 95% of the net increase of participants in the workforce will result from increases in the older workforce.
- The strongest growth in employment is expected in those older workers with a high school diploma, with some college experience and with a bachelor's degree.
- The number of older workers with a college degree is expected to grow an estimated 59% between 2006 and 2014, while the percent of older workers with a college degree is expected to grow better than 5%.

NOTE: Official demographic projections were combined with estimated educational attainment shares (based on trends since 1992 from the CPS), e.g., the typical share of bachelor's degree holders in the 55+ population. Trends in these educational attainment shares were verified against trends in the typical

level of enrollment of the 55-and-older population based on IPEDS data from the National Center for Education Statistics, e.g., the focus on graduate degrees and a general growth in college enrollment is reflected in our educational attainment projections.

Scenario 2: Acceleration of Labor Force Participation and Employment Activity

Assuming the above, plus that the percentage of the labor force employed will not remain constant but will experience growth over the next eight years, and also assuming that labor force participation rate of the older population will accelerate to move much closer to the participation rate of the overall population by 2014 (which is estimated to slightly decline in line with national trends), the following projections can be made:

NOTE: The labor force participation rate benchmark for Scenario 2 for older workers is set to 60% by 2014, up from 47.0% in 2006 (see table on page 18).

Scenario 2: Acceleration of Labor Force Participation and Employment Activity				
Projected Older Oregon Workforce (55+) by Educational Attainment, 2006-2014				
	2006	2014	# Change	% Change
Less than high school	44,510	48,623	4,113	9.24%
High school graduate–high school diploma	139,750	221,877	82,127	58.77%
Some college, but no degree	85,134	140,718	55,584	65.29%
Associate’s degree	27,467	55,255	27,788	101.17%
Bachelor’s degree	57,062	103,089	46,027	80.66%
Master’s degree	24,245	51,544	27,299	112.60%
Professional school degree	7,372	17,901	10,529	142.82%
Doctorate	6,288	10,734	4,446	70.71%
All college degrees	122,434	238,523	116,089	94.82%
TOTAL 55+ workers	391,828	649,741	257,913	65.82%
TOTAL Workforce	2,236,003	2,474,386	238,383	10.66%
<i>Note: The growth rate of the overall workforce is still below the OED growth projections.</i>				

- Under this scenario, the net gain in workers 55 and older would exceed the net gain in the total workforce.
- Total net gain of workers 55 and older is estimated at 66% in eight years, compared with total workforce growth of 10.7%.
- With an overall acceleration of the labor force participation and employment activity of the older workers, the number of college degree holders is expected to grow an estimated 95%.

NOTE: Current levels of labor force participation of the older population in Oregon are compared to the average U.S. level for this age group in 2005 and 2006. The average ratio from those two years of the Oregon to the U.S. rate is then applied to the U.S. labor force projections to 2014 for the 55-and-older population to obtain Oregon labor force projections of the older population. The numbers are then adjusted by the typical percentage of the older labor force that is employed (2004-2006 average) to obtain employment estimates for the next eight years (the employment is referring to number of jobs, i.e., fulltime or part time). The estimates are prepared for each major educational attainment group separately, i.e., based on CPS data. The percent employed of the older labor force for each educational group is estimated and projected. (The totals are comparable to projections based on U.S. Census Bureau Local Employment Dynamics (LED), once the Census data is adjusted to reflect all types of workers based on the CPS Class of Worker Table.)

7. SUMMARY OF OREGON'S PROJECTED WORKFORCE NEEDS

In 2006, there were an estimated 392,000 older workers in Oregon using the CPS data from the U.S. Census Bureau. Using Scenario 1 projections, by 2014 an estimated 140,000 additional older workers will be added to Oregon's older workers. Using Scenario 2 projections, an estimated 258,000 older workers will be added. This section of the report matches up this supply with projections of occupational openings by educational requirement for 2006-2014, obtained for 2004-2014 from the OED. Job openings refer to the number of new job positions, including self-employment, not the number of individuals actually employed. Educational requirement refers to the minimum education/training required to perform a job satisfactorily. The categories from the Bureau of Labor Statistics somewhat parallel the categories of educational attainment from the U.S. Census Bureau used earlier in this report. Results are split into growth due to new jobs and growth due to replacements. The term "openings" refers to the sum of new jobs and replacement jobs. In addition, estimates are made of turnover jobs.

A Note about Turnover

Official job openings projections do not include individuals who change employers but remain in the same occupation. The job openings due to this type of labor market activity have been estimated independently and added to the projected openings to give "total hires."

The turnover rates are provided by the U.S. Census Bureau LED Quarterly Workforce Indicators adjusted for the median years of tenures provided by the Bureau of Labor Statistics through the CPS grouped into median tenure for college occupations and non-college occupations. The adjusted turnover rate is then applied to the projected job openings due to growth as well as current employment, updated each year for job growth, and added to the total number of openings for the state. [Even though the LED turnover rate takes into account net replacements due to reasons covered under the Official Bureau of Labor

Statistics occupational projections, such as retirement, it is assumed that the rate (which is a net measure) is the same across all types of turnover events.]

Projected Openings and Total Hires in Oregon 2006-2014 by Minimum Education Required for the Job						
Education/ Training Requirement	Employment Growth Rate	Openings due to Growth	Openings due to Replacements	Total Openings	Turnover	Total Hires 2006- 2014
No college degree	10.3%	134,736	248,781	383,517	1,474,688	1,858,205
Associate's degree	11.7%	19,290	27,472	46,762	149,721	196,483
Bachelor's degree	11.5%	30,677	45,252	75,929	255,155	331,084
Master's degree	14.1%	4,950	8,242	13,192	41,006	54,198
Professional school degree	20.5%	2,569	2,286	4,855	15,436	20,291
Doctorate	10.2%	144	216	360	1,280	1,640
TOTAL	10.9%	192,366	332,249	524,615	1,937,286	2,461,901
<i>Source: Oregon Employment Department; Bureau of Labor Statistics</i>						

Information is scant on how many growth jobs, replacement jobs, or turnover jobs can be filled by older workers. The following two tables portray a perfect world in which projected older workers would match job requirements regardless of age or circumstance. This does not take into account that older workers may not prefer to work fulltime in some of these openings or may require more flexible work arrangements than might be offered by employers. Left out of the equation, too, is the age discrimination older workers may face in being hired for or in retaining jobs. Further, it does not take into account whether workers near retirement age who are relocating to Oregon will work more or less than current older residents. However, historically, the 55-and-older population in Oregon has tended to have a much higher labor force participation rate than its U.S. counterparts. The following "perfect match" tables are of most use in identifying those educational attainment categories most likely to satisfy future Oregon workforce needs.

Scenario 1 – Possible Contribution of Oregon’s Older Workforce (55+), 2006-2014, Assuming Perfect Match					
	Total Estimated Hires, 2006-2014	Total Openings, 2006-2014	Projected Change in Older Workforce – Scenario 1	Contribution of new 55+ Workers to Job Openings	Contribution of new 55+ Workers to Total Hires
No college degree	1,858,205	383,517	67,078	17.5%	3.6%
Associate's degree	196,483	46,762	17,745	37.9%	9.0%
Bachelor's degree	331,084	75,929	27,289	35.9%	8.2%
Master's degree	54,198	13,192	17,930	135.9%	33.1%
Professional school degree	20,291	4,855	7,275	149.8%	35.9%
Doctorate	1,640	360	2,495	693.1%	152.1%
TOTAL	2,461,901	524,615	139,812	26.7%	5.7%
<i>Source: U.S. Census Bureau, Current Population Survey, Bureau of Labor Statistics; Oregon Employment Department</i>					

Under Scenario 1, continuing the past workforce trends of the older population, the active 55+ population could contribute as much as 5.7% to the new hires projected to occur between 2006 and 2014. Their contribution would be greatest for those occupations requiring a doctorate degree where there is expected to be a surplus in older workers with the educational attainment required. The 55+ population with master’s and professional school degrees could contribute over 30% to the total hires over the next eight years. Fewer contributions are expected for non-degree workers as well as associate’s and bachelor’s degree holders. When only job openings without basic turnover are taken into account, the older workforce could contribute as much as 26.7%.

Scenario 2 – Possible Contribution of Oregon’s Older Workforce (55+), 2006-2014, Assuming Perfect Match					
	Total Estimated Hires, 2006-2014	Total Openings, 2006-2014	Projected Change in Older Workforce – Scenario 2	Contribution of new 55+ Workers to Job Openings	Contribution of new 55+ Workers to Total Hires
No college degree	1,858,205	383,517	141,823	37.0%	7.6%
Associate’s degree	196,483	46,762	27,788	59.4%	14.1%
Bachelor’s degree	331,084	75,929	46,027	60.6%	13.9%
Master’s degree	54,198	13,192	27,299	206.9%	50.4%
Professional school degree	20,291	4,855	10,529	216.9%	51.9%
Doctorate	1,640	360	4,446	1235.0%	271.1%
TOTAL	2,461,901	524,615	257,912	49.2%	10.5%
<i>Source: U.S. Census Bureau, Current Population Survey, Bureau of Labor Statistics; Oregon Employment Department</i>					

Under Scenario 2, with an acceleration of labor force participation and employment activity, the contribution of older workers rises to 10.5%. The greatest proportional increases between the above and Scenario 1 would be for non-degree holders, doctorates, and bachelor’s degree holders.

NOTE: The *Oregon Employment Retention Report* from January 2007 states that the retention rate of older workers is about 7% lower than for all workers, primarily due to the low retention of the 65-and-older workforce. Noteworthy, though, is the fact that workers 55-64 years old have a *higher* retention rate than those under 35 years old and might therefore be considered the prime older contributing group (which constitutes the majority of the increase in the older educated workforce in all cases). Nevertheless, the above “best-case scenario” estimates should be qualified by the following considerations:

- A. Assuming employers are willing to accept older workers due to their shorter expected work life, employers may still expect retention rates to remain higher for those just 10 years younger. The group 35-55 years old will therefore be preferred as long as such workers are available. This might discourage general labor force participation of the older population.

- B. The projected workforce and hires are referring to jobs, counting full-time and part-time employment equally (i.e., they are not full-time equivalents). However, the typical ratio of full-time to part-time employment of active older workers will be different from the demands for the projected job positions. As noted on page 19, older workers' full-time participation is currently about 4-5% lower than that of the overall population, a gap that has been narrowing over recent years. This will again differ by educational attainment.

- C. Research on active aging indicates that older workers are selective about their work and work environments, primarily because they have some source of income and are looking for situations that fit with other life goals. The challenge of employers is increasingly to create attractive work environments, such as opportunities to work in teams, flexible work hours, opportunities to take long vacations, flexibility regarding sick leave, etc. As noted earlier, experiments along these lines are underway in countries that are aware that the longevity revolution is at hand.

Due to fast-moving conditions in the labor market and the changing lifestyles of older workers as they live longer, become more active, and need additional income, these estimates can change noticeably from year to year, and especially over five-year periods. To keep up with trends in older worker labor force participation and employment, with their continuing education/training and with the frequent release of more applicable data, recalculations of the above scenarios with increasing sophistication are advisable every year.

8. KEY FINDINGS

The principal finding of this report is that Oregon is not running out of workers, because a promising supply of qualified older workers could help satisfy demand, particularly for jobs requiring professional credentials and associate's, bachelor's, and master's degrees. But this does not imply that no action is needed. There is a range of business, civic, education, and government actions and partnerships necessary before Oregon can fully embrace the longevity revolution set to affect the U.S. labor market over decades to come.

- Oregon shows many signs of a state entering the longevity revolution—one in which active aging will have greater impact in the workplace and in post-secondary education. While issues such as health, community support services, and pensions will remain important, active aging is on the rise with the expanding involvement of older Americans in work, volunteerism, learning, and service.
- Oregon is experiencing:
 - Longer life spans.
 - Increasing numbers and proportion of the population in the 55-75 age group.
 - An increasing share of older workers in the workplace.
 - An increasing share of those 55 and older in the workforce working fulltime (increasing 3.1% over the past 5 years).
- The employment pattern of older Oregon workers differs markedly from the larger Oregon workforce:
 - More older workers are employed in the government and in the third sector—nonprofits, education, and health care.
 - A much higher percentage of older workers is self-employed, both incorporated and unincorporated, although these numbers have

been falling over the last five years. They are part of the state's "entrepreneurial cohort," which some incorrectly ascribe to the age 25-34 "creative class."

- Older workers are highly concentrated in knowledge and information occupations (managerial, professional, administrative)—occupations that are growing as Oregon and the U.S. move rapidly toward an "innovation economy."
- Compared with the Oregon workforce as a whole, older workers are found in higher concentrations in the following industries:
 - Management
 - Agriculture
 - Educational services
 - Utilities
 - Forestry, logging, fishing, hunting and trapping
 - Public administration
 - "Other Services, except government," such as maintenance and repair, household services, and religious and non-profit service
- By far the highest proportion of older workers is in management of companies and enterprises, where they hold nearly 90% of these positions.
- Educational attainment rates and college enrollment rates are distinctive:
 - Older Oregon workers have, on average, a lower educational attainment level than do their younger counterparts or their same-age counterparts across the nation—22.7% of the 55-and-older population in Oregon holds a bachelor's degree or higher, compared to 23.4% for the nation as a whole.
 - Their educational attainment is distributed bi-modally, with higher concentrations among those with less than high school or high

school diplomas, and among those with those with master's or professional degrees.

- Only 4.3% of all Oregonians enrolled in college are 50 or older, but they account for 9% of college enrollments in graduate studies.
- Oregon will experience remarkable growth in its well-educated older population. Between 2006 and 2014, growth rates for those with associate's degrees are estimated at 51.8%, with bachelor's degrees at 36.3%, with master's degrees at 60%, and with professional school degrees at 83.2%. These are the very credentials called for by an economy moving into high value-added products and services.
- Regardless of whether labor force participation rates stay constant or accelerate, as older residents choose to stay active with employment, Oregon will experience a strong supply of qualified older workers. Future Oregon workforce growth could be almost totally accounted for by increased numbers of older workers. This suggests that concerns about a "looming labor shortage" may be overblown, as long as older qualified workers choose to remain active in the labor force at current or accelerated rates and employees' and employers' preferences can be matched.
- Substantial amounts of projected job demand can be met by the availability of older qualified workers. In fact, under both scenarios examined, older workers are more than sufficient to meet demand for those openings requiring a doctorate degree. The same is true for those with a professional school degree. For workers regardless of level of education, older workers could account for 5.7% to 10.5% of all hires between 2006 and 2014 and 26.7% to 49.2% of all job openings (jobs created due to growth or replacement).

9. IMPLICATIONS

This fact-finder is intended to be just that: a set of organized facts to serve as a profile of Oregon's aging workforce. It is exploratory in nature, serving as a backdrop for discussions at the Age Boom Conference. To this end, policies and practices regarding older workers have not been reviewed; neither is this report the place for policy recommendations. However, the foregoing data scan does raise significant implications for state policy, workforce agencies, educational institutions, and employers/employer organizations.

Such implications must be considered in the context of Oregon's multi-decade slippage in economic competitiveness. A simple, widely recognized measure of economic progress is per capita income. In 1960, Oregon's per capita income matched that of the U.S. per capita income. However, by 2005 the state had dropped to 93.3% of the U.S. average per capita income. And because economic growth in today's economy is tied to the knowledge and skills of the workforce, it comes as no surprise that Oregon's percentage of population with a bachelor's degree would also have dropped as compared to U.S. averages, from 10.4% above the U.S. average in 1960, to 1.8% above the U.S. average in 2005. The state does not appear to have the momentum for growth required for today's fast-changing economy. Its resident population has been growing slowly. In fact, 77.1% of the state's population growth is attributed to domestic and international in-migration (21.7% from international migration). Further, labor force participation of Oregon's resident workforce has declined from 68.1% in 2001 to 65.3% in 2005.

Along comes a substantial supply of well-educated potential workers just in time, and from an unexpected demographic—the aging population. Oregon's older population is surprisingly well educated and increasing in educational attainment due to in-migration of financially secure retirees. Oregon ranks above average on an “active aging” scale. One example of the state's active aging is that 9% of all

students enrolled in graduate programs are over age 50. If these residents continue to participate in the labor force at current rates, they could fill 37.9% of Oregon's job openings between 2006 and 2014 for jobs requiring an associate's degree and 35.9% for jobs requiring a bachelor's degree.

These findings are particularly encouraging as far as state workforce planning is concerned. The state can worry less about a worker shortage and more about preparing the existing, albeit aging, workforce for the challenges of tomorrow's job market. Educational institutions can partner with employers and business organizations to help ensure the re-skilling and re-careering of the older workforce and can research best practice workplaces for older employees. Employers can experiment with innovative employment arrangements for more selective older workers. Workforce agencies can provide outstanding labor market information and job boards for all ages to ensure a smoother functioning labor exchange. Finally, state leaders and decision-makers can craft state policies, practices and partnerships that encourage older residents to remain in the workforce.

The bottom line could be an Oregon economy invigorated by the longevity revolution, rather than drained by it. While Oregon undergoes a significant transition toward the 21st century innovation economy, its aging population can be leveraged to its advantage.